

WHAT IS CLAIMED IS:

1. A calculator capable of recovering cleared values, comprising:
an input unit including deletion keys for clearing currently displayed
data or recorded data of the calculator, and an UNDO key for recovering
5 the cleared data;

an output unit for displaying status of the calculator and operating
results;

an input/output buffer coupled to the input unit and the output unit
and providing a display buffer for temporarily storing input and output
10 data;

a memory for storing program codes and memory space required for
operating;

an algebra logic processor coupled to the input/output buffer and the
memory for providing arithmetic and logical operations;

15 a stack register coupled to the algebra logic processor for temporarily
storing previously cleared data by one of the deletion keys, wherein
whenever the displayed data or the recorded data is cleared by pressing
one of the deletion keys, the cleared data is pushed into the stack register;
and

20 a flag register coupled to the algebra logic processor, and being set
when the displayed data or recorded data is cleared by pressing one of the
deletion keys, whereby, when the UNDO key is pressed and if the flag
register indicates that the displayed data or recorded data was cleared by
one of the deletion keys previously, a data entry is popped from the stack
25 register and the flag register is cleared.

2. The calculator as claimed in claim 1, wherein the deletion keys comprise a backspace (BACK) key, a clear entry (CE) key, a clear (C) key, a memory clear (MC) key, and a memory recall clear (MRC) key; the flag register comprises a CM flag, a CE flag, a MRC flag, and an
5 UNDO recorder.

3. The calculator as claimed in claim 2, wherein when the clear (C) key is pressed and the calculator is in a previous result display mode , a calculation result stored in the memory is pushed into the stack register; the CM flag is set to 1; the CE flag is cleared to 0; the MRC flag is cleared
10 to 0; the UNDO recorder is set to 1.

4. The calculator as claimed in claim 2, wherein when the clear (C) key is pressed and the calculator is in a previous data input mode , input data temporarily stored in the display buffer is pushed into the stack register; the CM flag is cleared to 0; the CE flag is set to 1; the MRC flag
15 is cleared to 0, and the UNDO recorder is set to 1.

5. The calculator as claimed in claim 2, wherein when the CE key is pressed, the input data stored in the display buffer is pushed into the stack register; the CM flag is cleared to 0; the CE flag is set to 1, the MRC flag is cleared to 0, and the UNDO recorder is set to 1.

20 6. The calculator as claimed in claim 2, wherein when a value is inputted by the input unit, the value is entered into the display buffer for display and the CM flag and the CE flag are cleared to 0, and if the MRC flag is 0, the stack register is cleared and the UNDO recorder is cleared to 0.

25 7. The calculator as claimed in claim 2, wherein when an operator

is inputted by the input unit, an expression previously inputted is calculated and the input operator is displayed and the CM flag and CE flag are cleared to 0, and if the MRC flag is 0, the stack register is cleared and the UNDO recorder is cleared to 0.

5 8. The calculator as claimed in claim 2, wherein when the MC key is pressed or the MRC key is pressed for two consecutive times, data stored in the display buffer is pushed into the stack register; the CM flag is cleared to 0; the CE flag is cleared to 0; the MRC flag is set to 1; the UNDO recorder 174 is set to 1.

10 9. The calculator as claimed in claim 2, wherein when the BACK key is pressed and if there is data in the display buffer, the data is pushed into the stack register and the UNDO recorder is incremented.

15 10. The calculator as claimed in claim 2, wherein when the UNDO key is pressed, and if the UNDO recorder is not 0 and the CM flag, CE flag and MRC flag are 0, 0 and 1, respectively, an entry in the stack register is popped and stored in the display buffer.

20 11. The calculator as claimed in claim 2, wherein when the UNDO key is pressed, and if the UNDO counter is not 0 and the CM flag, CE flag and MRC flag are 0, 0 and 1, respectively, an entry in the stack register is popped and stored in the display buffer and the UNDO recorder is decremented.

25 12. The calculator as claimed in claim 2, wherein when the UNDO key is pressed, and if the UNDO recorder is not 0 and at least one of the CM and the CE flags is not 0, an entry in the stack register is popped and stored in the display buffer, and the CM flag, CE flag, and UNDO

recorder are cleared to 0.

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